enables the switch component thereby allowing a data signal to be transmitted on an upstream channel; and

an amplifier for amplifying the data signal from the upstream transmitter before being transmitted on the upstream channel,

wherein the switch component is contained in the amplifier.

20. (New) The cable modem of claim 19 wherein the amplifier is a variable amplifier.

Cl Cont.

21. (New) A method of reducing noise leakage from a cable modem onto a cable plant, the method comprising:

activating a switch component in the cable modem by sending a control signal from an upstream transmitter to the switch component when the upstream transmitter is ready to transmit a data signal upstream;

transmitting the data signal on the upstream channel;

deactivating the switch component by sending the control signal from the upstream transmitter to the switch component after the data signal has been transmitted on the upstream channel thereby reducing noise leakage when the cable modem is not actively transmitting and terminating noise from the cable plant when the cable modem is not powered;

determining whether an amplifier in the cable modem can enable at a sufficient speed to not cause data packet collisions; and

activating only the switch component if the amplifier cannot enable at a sufficient speed.

22. (New) The cable modem of claim 1, wherein the control signal from the upstream transmitter to the switch component activates and deactivates the amplifier.

23. (New) The method of claim 10 further comprising activating and deactivating the amplifier by the control signal from the upstream transmitter to the switch component.

24. (New) The apparatus of claim 18 further comprising means for activating and deactivating the amplifier by the control signal from the upstream transmitter to the switch component.